AMENDMENTS TO THE CLAIMS:

1. (currently amended) A method for collecting and separating whole blood into one or more components comprising:

providing a disposable blood separation fluid circuit adapted to cooperate with a reusable separation controller, the fluid circuit including a fluid flow path for communication with a blood source, an initial collection chamber in fluid communication with the fluid flow path and a blood processing chamber in fluid communication with the initial collection container;

connecting the fluid flow path to a blood source;

collecting a quantity of whole blood from the source in the initial collection container;

~~disconnecting the source from the disposable fluid circuit;~~

mounting the disposable fluid circuit in association with the reusable controller; ~~and~~

processing the collected blood through the disposable fluid circuit ~~assembly~~ and the processing chamber to separate it into the desired components; and

disconnecting the source from the fluid circuit before all of the blood in the fluid circuit is processed in the processing chamber.

2. (original) The method of claim 1 in which the mounting occurs after the source is disconnected from the fluid circuit.

3. (original) The method of claim 1 in which the initial collection chamber includes a quantity of anticoagulant.

4. (original) The method of claim 1 in which about 200-750 ml of whole blood are collected in the initial collection chamber.

5. (original) The method of claim 1 in which about 500 ml of whole blood are collected in the initial collection chamber.

6. (original) The method of claim 5 in which a unit of whole blood is collected in the initial collection chamber.

7. (original) The method of claim 1 including connecting additional collection chambers of whole blood to the fluid flow path for processing through the fluid circuit.

8. (currently amended) The method of claim 1 in which the reusable ~~device~~ controller is not in the immediate vicinity of the source during the collecting or processing.

9. (currently amended) The method of claim 1 in which the reusable ~~device~~ controller is at a different location than where the collecting takes place.

10. (original) The method of claim 1 in which the blood source is a human.

11. (original) The method of claim 7 in which the blood in the initial collection chamber is processed sequentially.

12. (original) The method of claim 7 in which the blood in the initial collection chamber is processed simultaneously.

13. (original) The method of claim 1 including pooling together blood from other blood sources and flowing the pooled blood into the flow path for processing through the fluid

circuit.

14. (original) The method of claim 1 in which about 405 - 550 ml of whole blood are collected in the initial collection chamber.

15. (currently amended) A disposable blood processing fluid circuit assembly comprising:

a blood processing chamber and a plurality of containers and associated fluid flow tubing including a source flow path, and adapted for processing blood while in fluid communication with a blood ~~source;~~

~~said blood processing assembly further including an initial collection container for receiving a quantity of whole blood from the source for processing after communication with the blood source has ceased~~ source and after fluid flow through the source flow path is discontinued.

16. (currently amended) The assembly of claim ~~15~~ 19 wherein the initial collection container has a volume sufficient to hold a unit of whole blood.

17. (currently amended) The assembly of claim ~~15~~ 19 in which the initial collection container has a volume between about 200 ml and 750 ml.

18. (currently amended) The assembly of claim ~~15~~ 19 further comprising a quantity of ~~anticoagulant~~ anticoagulant in the initial collection container.

19. (new) The assembly of claim 15, further comprising an initial collection chamber for

receiving a selected quantity of whole blood from the source flow path for processing after fluid communication through the source flow path is discontinued.

20. (new) A method for collecting and separating whole blood into one or more components comprising:

providing a disposable blood separation fluid circuit adapted to cooperate with a reusable separation controller, the fluid circuit including a fluid flow path for communication with a blood source and a blood processing chamber in fluid communication with the fluid flow path;

connecting the fluid flow path to a blood source;

collecting a quantity of whole blood from the source in the fluid circuit;

mounting the disposable fluid circuit in association with the reusable controller;

processing the collected blood through the disposable fluid circuit and the processing chamber to separate it into the desired components; and

disconnecting the source from the fluid circuit before all of the blood in the fluid circuit is processed in the processing chamber.

21. (new) The method of claim 20, wherein the blood from the source is collected in an initial collection container prior to processing in the processing chamber.